Copper Tin Alloy Nanopowder alloys are made from copper and tin, and were the first to be developed about four thousand years ago. Copper tin alloys or tin bronzes are known for their corrosion resistance. Tin bronzes are stronger and more ductile than red and semi red brasses. They have high wear resistance and low friction coefficient against steel. Tin bronzes; with up 15.8% tin, retain the structure of alpha copper. The tin is a solid solution strengthener in copper, even though tin has a low solubility in copper at room temperature. The room temperature phase transformation are slow and usually does not occur, therefore these alloys are single phase alloys. The tin bronzes are used in bearings, gears, piston rings, valves and fittings.
Applications

✅ Good Castability
  • Sand casting
  • Centrifugal castings: rings/discs
  • Die casting
  • Continuous castings: bars/sections/hollows

✅ In-built Corrosion Protection

✅ Low Frictional Properties and Good Resistance to Wear
  • Worm wheels
  • Automobile gear selector forks
  • Many other components where low friction and good wear resistance are required are commonly made from copper alloy castings.

✅ Non-Sparking Characteristics

Additional Powder Characteristics

<table>
<thead>
<tr>
<th>Stock No.</th>
<th>Purity</th>
<th>APS</th>
</tr>
</thead>
<tbody>
<tr>
<td>NS6130-07-703</td>
<td>99.9%</td>
<td>&lt;100nm</td>
</tr>
</tbody>
</table>

Ordering Information and Stock Availability

✅ Product: Copper Tin Alloy Nanopowder
✅ Stock Availability: Available
✅ Distribution: Global
✅ Packing Sizes: 25Gms, 50Gms, 100Gms, 500Gms & Bulk Orders

Handling Recommendations

✅ Store in the original container in a dry location.
✅ Tumble contents prior to use to prevent segregation.
✅ Open containers should be stored in a drying oven to prevent moisture pickup.

Safety Recommendations

Download MSDS/SDS NS6130-07-703
SDS is available from the Nanoshel
Website at https://www.nanoshel.com/sections/alloy-nano-powders

/nanoshel
www.nanoshel.com | sales@nanoshel.com
Tel: +91 9779550077, 9779238252

www.nanoshel.com | sales@nanoshel.com